

In re Patent Application of:  
**GRIS**  
Serial No. 10/689,528  
Filing Date: OCTOBER 20, 2003

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**In the Claims:**

Claims 1-14 (Cancelled).

15. (Currently Amended) A process for doping a pattern of electrically isolated resistive elements comprising:

electrically charging selected elements of the pattern;

doping the ~~charged~~ selected elements as a function of their charge after electrically charging the selected elements; and

annealing the pattern.

16. (Previously Presented) A process according to Claim 15, wherein the electrically charging is performed using at least one of an electron beam and an ion beam.

17. (Previously Presented) A process according to Claim 15, wherein the electrically charging comprises:

electrically charging all of the elements of the pattern; and

discharging elements other than those corresponding to the selected elements using a laser beam.

18. (Previously Presented) A process according to Claim 15, wherein the doping results in ions being absorbed on a surface of the charged elements.

19. (Previously Presented) A process according to Claim 18, wherein the ions are produced using plasma; and

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wherein the ions comprise at least one of boron, aluminium, indium, phosphorus, arsenic and antimony.

20. (Previously Presented) A process according to Claim 15, wherein the doping comprises implanting ions on a surface of uncharged elements with an energy of less than 100 eV.

21. (Previously Presented) A process according to Claim 20, wherein the implanted ions comprise at least one of boron, aluminium, indium, phosphorus, arsenic and antimony.

22. (Previously Presented) A process according to Claim 15, wherein the selected elements of the pattern comprise a semiconductor material.

23. (Previously Presented) A process according to Claim 22, wherein the semiconductor material comprises at least one of silicon, germanium and gallium arsenide.

24. (Currently Amended) A process for manufacturing an integrated circuit in a silicon substrate comprising:

forming an insulating layer on the silicon substrate;

forming a silicon layer on the insulating layer;

forming a pattern of resistive elements in the silicon layer;

electrically charging selected elements; and

doping the ~~charged~~ selected elements as a function

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of their charge after electrically charging the selected elements.

25. (Previously Presented) A process according to Claim 24, wherein the elements that are charged are separated by conducting lines connected to a fixed potential.

26. (Previously Presented) A process according to Claim 24, wherein the electrical charging is performed using at least one of an electron beam and an ion beam.

27. (Previously Presented) A process according to Claim 24, wherein the electrical charging comprises:

electrically charging all of the elements of the pattern; and

discharging elements other than those corresponding to the selected elements using a laser beam.

28. (Previously Presented) A process according to Claim 24, wherein the doping results in ions being absorbed on a surface of the charged elements.

29. (Previously Presented) A process according to Claim 28, wherein the ions are produced using plasma; and wherein the ions comprise at least one of boron, aluminium, indium, phosphorus, arsenic and antimony.

30. (Previously Presented) A process according to Claim 24, wherein the doping comprises implanting ions on a surface of uncharged elements with an energy of less than 100

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eV.

31. (Previously Presented) A process according to Claim 30, wherein the implanted ions comprise at least one of boron, aluminium, indium, phosphorus, arsenic and antimony.

Claims 32-38 (Cancelled).